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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,523	06/19/2007	Shinya Shirasaki	DC10023US (71,051-069)	6866
27305 7590 10/13/2010 HOWARD & HOWARD ATTORNEYS PLLC 450 West Fourth Street Royal Oak, MI 48067			EXAMINER NELSON, LINDSAY ANN	
			ART UNIT	PAPER NUMBER
			1766	
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			10/13/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,523	<b>Applicant(s)</b> SHIRASAKI ET AL.	
	<b>Examiner</b> LINDSAY NELSON	<b>Art Unit</b> 1766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-11 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willing, US Patent number 4,248,751 (hereinafter Willing) and further in view of Johnson et al, US Patent number 4,221,688 (hereinafter Johnson).

5. Regarding claims 1 and 4-6 and 14-15, Willing discloses an emulsion comprising a vinyl end-blocked polydiorganosiloxane and an organosilicon compound having silicon-bonded hydrogen atoms with water and a surfactant, and further with a platinum

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catalyst (abstract). Further, Willing discloses that the viscosity range of the vinyl end-blocked polydiorganosiloxane is from 0.1 to 100 Pa·s (100-100,000 mPa·s), and that the silicon-bonded hydrogen atoms of the organosilicon compound have 2.1 hydrogen atoms per molecule (column 4 lines 35-55). Willing further discloses in the EXAMPLE (column 6 lines 25+) wherein 8 parts of surfactant and 4 parts of water (total of 12 parts for this component) to 40 parts by weight of the siloxane mixture of surfactant in water is combined to form an emulsion (5 percent of the water-soluble polymer). Willing also discloses that the emulsifying agents and surfactants can be nonionic (column 2 lines 58-61).

6. While Willing does disclose the above emulsion, they do not show an example wherein an emulsifying agent is used. However, they do disclose that emulsifying agents can be added, and further rely upon US Patent number 3,294,725 for examples of such emulsifying agents (column 2 lines 55-60) wherein sodium salts of the acid catalysts used are preferable emulsifying agents (column 5 lines 55-60 of 3,294,725) to aid in the emulsification of the siloxane (column 2 lines 3-5) wherein the emulsifying agent is used in about 1 percent by weight of the composition (EXAMPLE 7, column 8). Therefore, one skilled in the art would be motivated to use not only a surfactant like that of Willing, but further to add an emulsifying agent to aid in the emulsification process as that of 3,294,725. Further, while Willing does not specifically disclose a sponge emulsion, they do mention that their composition is used to coat a substrate to improve the release properties (abstract) wherein the instant specification discloses the use of

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the “rubber sponge” as a copier roll surface-covering material which one skilled in the art would immediately realize is substantially similar to that of instant claims.

7. Willing discloses the above composition which comprises nonionic surfactants and emulsifying agents, but does not specifically disclose the use of a water-soluble polymer. However, in the same field of endeavor, that is emulsions which cure to form elastomers, Johnson discloses that thickeners, preferably sodium salts of polyacrylates, can be added to the composition to enhance certain characteristics, such as improving the handling characteristics of the silicon emulsion, and also structural viscosity (column 5 line 55 - column 6 line 16). Therefore, one skilled in the art would be motivated to add a sodium salt of a polyacrylate to the composition of Willing for the benefit of improving upon the handling characteristics.

8. Regarding claims 2-3, 8-9, and 17-19 Willing discloses the above composition, but does not necessarily disclose the method steps being in the same order as that of instant claims. However, it is *prima facie* obviousness to reverse the steps of a process *Ex parte Rubin*, 128 USPQ 440 (Bd. App. 1959) (Prior art reference disclosing a process of making a laminated sheet wherein a base sheet is first coated with a metallic film and thereafter impregnated with a thermosetting material was held to render *prima facie* obvious claims directed to a process of making a laminated sheet by reversing the order of the prior art process steps.). See also *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results); *In re Gibson*, 39 F.2d 975, 5

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USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.).

9. Regarding claims 7, 10, 16 and 19, Willing further discloses, with all of the above arguments, the above composition wherein 8 parts of surfactant is used to 40 parts by weight of the siloxane mixture, wherein this shows 5 weight percent of surfactant (instant (b-1)) used in the composition, which falls within the claimed range.

10. Regarding claims 11 and 20, Willing further discloses, with all of the above arguments, the EXAMPLE relied upon above wherein the emulsion is heated at about 60° C, then allowed to air dry (evaporation of water).

11. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willing and Johnson as applied to claims 1 and 11 above, and further in view of Elias, US Patent number 4,427,811 (hereinafter Elias).

12. Regarding claim 12, while Willing and Johnson disclose the above composition, and further that the cured product may further be heated (see column 4 lines 4-13), but fails to specifically disclose the temperature at which it should be heated to aid in evaporation.

13. In the same field of endeavor, that is film forming silicone containing emulsions, Elias discloses that the compositions are further heat-aged at 150° C to test the compositions post curing (EXAMPLE 3, column 10 lines 35+). Therefore, one skilled in the art would be motivated to heat-age the composition of Willing at 150° C for the benefit of testing the durability of the composition.

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14. Regarding claim 13, while Willing is silent with respect to the properties of air bubbles, one skilled in the art would realize that, because the compositions of Willing are prepared in a substantially similar method to those of instant claims, the composition of Willing would have substantially similar properties, and as such would not contain air bubbles either.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINDSAY NELSON whose telephone number is (571)270-7735. The examiner can normally be reached on M-Th, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LINDSAY NELSON/  
Examiner, Art Unit 1766

/RANDY GULAKOWSKI/  
Supervisory Patent Examiner, Art Unit 1766